FIELD TRIPS OF THE CLUB

EARLY BLOSSOMING TREES ON BEAR MOUNTAIN TRIP

Several trees and shrubs were found in bloom, on Sunday, March 23 on a field trip in the Hudson Highlands, in the eastern part of the Bear Mountain-Harriman State Park. Acer rubrum, Populus tremuloides, Corylus americana, Ulmus fulva and Alnus rugosa were in full bloom. Betula lenta was well advanced. Several good stands of the American aspen were seen, some of even age, which had escaped fire and were eight to ten inches in diameter, handsome in their olive bark. Gray birch and American aspen are the trees that usually cover up the cut over and burned areas first in this region.

Herbaceous plants were not in bloom, except the hardy skunk cabbage. Coltsfoot, *Tussilago farfara*, was seen in bright golden bloom along railroad fills on the way to Bear Mountain; it bloomed on the Palisades about March 10. Arbutus buds were showing a trace of color, Hepatica was still wrapped in fur.

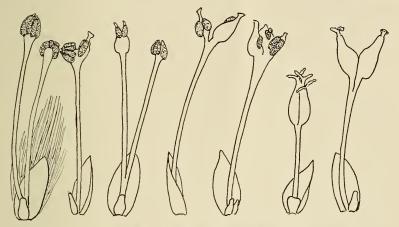
Four Lycopodiums—*lucidulum clavatum, obscurum* and *complanatum* were seen in a swamp west of Bear Mountain; also a sturdy clump of the striking Tree Moss, Climacium.

Leaf and flower buds of the red-berried elder, *Sambucus racemosa*, were ready to open, along the new fill of the Popolopen Drive. Why do not those who are concerned in producing new cover for such construction work, use this handsome native shrub more often, with its early flowers, and early fruit, maturing in late July. It will grow in raw rocky fill, and asks no favors, only a start. *Rubus odoratus* is another native shrubby plant which volunteers to cover such raw spots, and is handsome in leaf and bloom. The parapet blocks on this Drive are interesting specimens of the geological formations of the district.

RAYMOND H. TORREY

FIELD TRIP OF APRIL 6, 1930

A party of thirty four members and friends of the club started north from the Dyckman Street ferry along the Palisades. Near the ferry house the party stopped to examine the patch of coltsfoot that had been found in blossom on the trip of March 9th. The month that had elapsed seemed to have made little difference in the appearance of the plant, there were about the same number of open flower heads, but no sign of any in fruit. Along the path there was a more noticeable change, the elms and alders that had been in full bloom had now past the blossoming season, red maples that had not shown flowers before were now in their prime. A few hepaticas were found in blossom and dutchmen's breeches was abundant on the hillsides, some fully out, but mostly with the flower buds only half open. A patch of periwinkle, *Vinca minor*, showed its violet blossoms half hidden among the evergreen leaves. This and a few gnarled apple trees marked the location of a home of long



Staminate flowers of willow partly transformed to pistillate.

ago. Near Buttermilk Falls the party climbed to the top along a long disused road, stopping to note the flower buds of the redberried elder, the opening leaf buds of the bladder nut and the vines of the moon seed, Menispermum. Search along the brook at the top failed to reveal any of the golden club, Orontium aquaticum, in blossom, though a few leaves had reached the surface and some of the flower spikes were showing below. Back in the Kelders the heart-leafed willow was just coming into bloom while Salix discolor was past its prime. Two shrubs, apparently of discolor, were found with the flowers showing all stages of transition from staminate to pistillate. Evidently staminate plants, every catkin had some flowers with stamens transformed into pistils. Dissection with a pen knife showed ovules in these ovaries while the stamens were all shedding pollen. The accompanying sketches show some of the many forms,

the long silky hairs of the scales being omitted in all but the first. As the party descended the broken edge of the Palisades above Alpine the rock cress, *Arabis lyrata*, showed masses of white flowers in the crevices of the rocks, while numerous plants of the sickle pod, *A. canadensis*, had clusters of flower buds down close to the leaves. In a hedge along the road above the Palisades one of the party stopped to examine an old bird's nest, finding in it two eggs, one evidently that of the builder of the nest, a chipping sparrow, though the egg was bleached white, the other a cow bird's. Few birds were seen, the ones most worthy of note being a few phoebes and a small flock of fox sparrows.

GEORGE T. HASTINGS

FIELD MEETING OF APRIL 12

Springs flowers were found to be late in bloom, on the joint excursion of the Torrey Botanical Club and the New York Section of the Green Mountain Club, in the South Mountain Reservation of the Essex County Park system, on Saturday, April 12. Apparently cool weather had slowed up the progress of vegetation; the woods were still mostly brown and bare, but along the streams, some greenery was afforded by the skunk cabbage and green hellebore. Spice bush was only beginning to bloom in a few sunny spots. A few hepaticas were found in blossom.

However, in the absence of blooming plants, the party of twenty nine, under the leadership of Mr. Andrew Scarlett of South Orange, N. J. found several objects of geological interest. Chief among these was the Turtle Back Rocks, on First Watchung Mountain, near Northfield avenue, a striking example of incipient columnar formation in basalt. Boulders containing marine shell casts, from the Silurian formations of the Upper Hudson Valley, were found in glacial gravel in a pit, south of the Orange Reservoir. Fresh exposures of the columnar basalt in a quarry west of South Orange, were also of interest.

RAYMOND H. TORREY

FIELD MEETING OF APRIL 26

Spring had advanced swiftly in two weeks. The field meeting of Saturday afternoon, April 26, was another joint excursion of the Torrey Botanical Club, and New York Section of the Green Mountain Club, including also members of the New York and Brooklyn Entomological Societies, and the Yosians. Twenty eight were present. The route was from Douglaston, along the edge of the salt meadows, to Alley Pond, up the valley sapped in the moraine by a spring brook, through the kettle hole moraine area to Hillside Park and to Hollis.

The most striking flower display was the colony of Golden Club, Orontium aquaticum, in Potamogeton Pond, north of Queens Village. There were hundreds of the golden spadices, in the height of bloom, a splendid sight in the slanting light of the afternoon sun. This is certainly the largest and perhaps the only remaining station for this plant within the limits of Greater New York. Riccia natans which was found by members of a Torrey Botanical Club party last November, in this pond, then dried up, in its terrestrial state on the moist turf, had not reappeared in its floating form. Sium cicutaefolium was plentiful mixed among the Golden Club.

An interesting plant, not common in the vicinity of New York City, was *Duchesnea indica*, the Indian Strawberry, near Alley Pond. Another adventive, which caused discussion, because of a suggestion of sumac about it, though this was dispelled by the bare panicles of last year's bloom, was *Sorbaria sorbifolia*, escaped from cultivation on the site of an old farm, on a lane running south from Alley Pond.

Ranunculus fascicularis and abortivus were two members of that genus in bloom; also, in the same family two anemones, Anemone quinquifolia, and Anemonella thalictroides. Hepatica does not appear to have survived in the Queens woods, but Bloodroot, Sanguinaria canadensis was pleasingly persistent, some times in woods and again along hedgerows between fields where rocks had been piled. The Yellow Adder's Tongue, or Fawn Lily, to give it the much better common name proposed by John Burroughs, Erythronium americanum, was also common in wet places. While these are common species in outlying parts of the suburbs of New York City, it was pleasant to find them surviving so well within the limits of the metropolis and within sight of the skyscrapers on Manhattan. Spice bush was in height of bloom too, around Alley Pond.

The kettle hole ponds were dryer than usual at the season, and their conditions, where some that ordinarily sustain Potamogeton, Brasenia, Utricularia and other water plants, were quite dry, raised the question as to how these aquatics sustain such drying out of their habitats. One kettle hole, which I found golden with the flowers of *Utricularia vulgaris*, in July, 1929, was dry, and the plant can scarcely develop this year unless there is more moisture in the next few weeks. But perhaps they rest and take no harm, and reappear when conditions are suitable, if such dryness is not repeated too many seasons in succession.

RAYMOND H. TORREY

PROCEEDINGS OF THE CLUB

MEETING OF FEBRUARY 19, 1930

The meeting was called to order at The New York Botanical Garden at 3:30 P. M. by President Sinnott. The minutes of the meetings of January 15 and February 4 were read and approved. Twenty-two members were present.

A motion was made and seconded that the following members be made life members of the club:

Mr. George E. Osterhout, Windsor Weld Company, Colorado, and Miss Caroline Coventry Haynes, Highlands, Monmouth County, New Jersey.

A motion was made and seconded that our previous president, Dr. Denslow, be made a life member.

The following were unanimously elected to membership in the club:

Mr. Alexander Hirshkowitz, 1760 Montgomery Avenue, New York City; Mrs. Jennie L. S. Simpson, Hunter College, Park Ave. at 68th Street, New York City; Miss Marjorie Aldous, 43 High Street, Passaic, New Jersey.

The resignations of Miss Johanna Oppenheimer and Mr. Hans Wilkins were accepted.

The death of Dr. A. H. MacKay was also reported.

A committee consisting of Dr. Marshall A. Howe and Dr. Forman T. McLean, appointed at the meeting of January 3, to prepare a minute on the death of Maturin L. Delafield, reported as follows:

Maturin Livingston Delafield, whose death in Lausanne, Switzerland, on December 18, 1929, at the age of 60, we much regret to record, was Librarian of the Torrey Botanical Club